

CLAIMS

What is claimed is:

1. A method of managing configuration data for a multi-cell computer system, the method comprising:
storing configuration data for a given multi-cell computer system to nonvolatile memory of at least one cell of said given multi-cell computer system; and
storing a corresponding identifier to said nonvolatile memory of said at least one cell that uniquely identifies the given multi-cell computer system to which the stored configuration data corresponds.
2. The method of claim 1 wherein said storing configuration data comprises:
storing said configuration data to said at least one cell during a first boot-up process of said given multi-cell computer system.
3. The method of claim 2 wherein said storing a corresponding identifier comprises:
storing said identifier that uniquely identifies that said at least one cell received said stored configuration data while a member of said given multi-cell computer system.
4. The method of claim 2 further comprising:
determining during a second boot-up process of said given multi-cell computer system a unique identifier of said given multi-cell computer system; and
determining whether the unique identifier stored to any of said at least one cell matches the determined unique identifier of said given multi-cell computer system.
5. The method of claim 4 further comprising:
if determined that at least one cell's stored identifier matches the determined unique identifier of said given multi-cell computer system, then determining that such cell's stored configuration data is current for the given multi-cell computer system.
6. The method of claim 5 further comprising:
if determined that at least one cell's stored configuration data is current, using the determined current configuration data for configuring the given multi-cell computer system.

7. The method of claim 5 further comprising:

if determined that at least one cell's stored configuration data is current, storing the determined current configuration data for the given multi-cell computer system to other cells of said given multi-cell computer system.

8. The method of claim 5 further comprising:

if determined that at least one cell's stored configuration data is current, updating the other cells' stored identifier to match the determined unique identifier of said given multi-cell computer system.

9. The method of claim 1 wherein said given multi-cell computer system is a partition of a multi-cell computer system, said partition having a plurality of the cells of said multi-cell computer system.

10. The method of claim 1 wherein said configuration data comprises at least one item selected from the group consisting of:

information identifying a boot path for said given multi-cell computer system, information identifying a device to use as a system console for said given multi-cell computer system, information identifying any tests to run when booting up the given multi-cell computer system, and information identifying resources of said given multi-cell computer system.

11. A method of managing configuration data locally within a partition of a multi-cell computer system comprising:

determining a unique identifier for a given partition of the multi-cell computer system; determining if at least one cell in said given partition has an identifier stored to its respective nonvolatile memory that matches said determined unique identifier for said given partition; and

if determined that at least one cell of said given partition has a stored identifier matching said determined unique identifier for said given partition, using configuration data stored to that cell's nonvolatile memory for configuring the given partition.

12. The method of claim 11 wherein at least one cell of said given partition comprises configuration data stored to its respective nonvolatile memory that is not proper configuration data for configuring the given partition.

13. The method of claim 11 wherein said configuration data comprises at least one selected from the group consisting of:

information identifying a boot path for said given partition, information identifying a device to use as a system console for said given partition, information identifying any tests to run when booting up the given partition, and information identifying resources of said given partition.

14. The method of claim 11 further comprising:

if determined that at least one cell of said given partition has a stored identifier matching said determined unique identifier for said given partition, storing the configuration data of said at least one cell whose stored identifier matches said determined unique identifier to nonvolatile memory of other cells of said given partition.

15. The method of claim 14 further comprising:

storing an identifier that matches the determined unique identifier of said given partition to said nonvolatile memory of said other cells.

16. A method comprising:

storing configuration data for a multi-cell computer system locally to nonvolatile memory of each of a plurality of cells;

implementing the plurality of cells in a given multi-cell system; and

determining if any of said cells possess the proper configuration data corresponding to the given multi-cell system.

17. The method of claim 16 wherein said determining comprises:

said given multi-cell system autonomously determining if any of said cells possess the proper configuration data.

18. The method of claim 16 wherein said determining comprises:

calculating a unique identifier of said given multi-cell system; and

determining if a stored identifier in said nonvolatile memory of any one of said plurality of cells matches the calculated unique identifier.

19. The method of claim 16 wherein said storing configuration data comprises:
storing corresponding identifier data that uniquely identifies a multi-cell system to which the configuration data corresponds.

20. The method of claim 16 wherein said storing configuration data comprises:
storing configuration data for a first multi-cell system to a first one of said plurality of cells; and
storing configuration data for a second multi-cell system to a second one of said plurality of cells.

21. The method of claim 16 wherein said multi-cell system is a partition of a computer system.

22. The method of claim 21 further comprising:
storing said configuration data for said partition to a utility processor that is external to said partition.

23. A method of managing configuration data for a multi-cell system having a plurality of cells under the control of a common operating system, the method comprising:
during a boot-up process of the multi-cell system, a first cell determining whether it has stored in its non-volatile memory current configuration data for the multi-cell system;
if determined that the first cell has the current configuration data, the first cell providing this stored configuration data to other cells of said multi-cell system and using this stored configuration data for configuring the multi-cell system; and
if determined that the first cell does not have the current configuration data, determining if any cell of said multi-cell system has stored in its non-volatile memory the current configuration data for the system, and if determined that a cell of said multi-cell system has said current configuration data, then providing this configuration data to other of said cells of said multi-cell system and using this stored configuration data for configuring the multi-cell system.

24. The method of claim 23 wherein said first cell determining whether it has stored in its non-volatile memory current configuration data for the multi-cell system further comprises:
determining whether an identifier stored to said first cell's non-volatile memory matches a unique identifier of the multi-cell system.

25. The method of claim 23 wherein said multi-cell system is a partition having said plurality of cells under the control of a common operating system.

26. A method comprising:

during a first boot-up process of a multi-cell partition, distributing configuration data for the multi-cell partition to each of the cells of said multi-cell partition, wherein the configuration data is stored to non-volatile memory in each of the cells, and storing to said non-volatile memory of each cell a corresponding identifier that identifies that the configuration data corresponds to said multi-cell partition; and

during a second boot-up process of said multi-cell partition, a first one of the cells included therein determining whether a unique identifier for the multi-cell partition matches with the first cell's stored identifier, wherein if the first cell's stored identifier matches the unique identifier of the multi-cell partition, then determining that the configuration data stored to non-volatile memory of said first cell is the current configuration data for configuring the multi-cell partition.

27. The method of claim 26 further comprising:

between said first boot-up process and said second boot-up process, replacing said first one of the cells with a different cell having different configuration data stored to its respective non-volatile memory; and

said different cell determining during said second boot-up process that its stored identifier does not match the unique identifier for the multi-cell partition.

28. The method of claim 26 wherein said first one of the cells is a designated root cell of the partition.

29. The method of claim 26 wherein a round-robin approach is utilized within the multi-cell partition such that if said first cell does not have a stored identifier matching the unique identifier of the multi-cell partition, a second cell of said multi-cell partition determines whether it has a stored identifier matching the unique identifier of the multi-cell partition.

30. A system comprising:

a plurality of cells in a multi-cell system, wherein multiple ones of said cells include non-volatile memory to which are stored configuration data and a corresponding identifier that uniquely identifies a given multi-cell partition to which the cell's respective stored configuration data corresponds.

31. The system of claim 30 wherein at least one cell of said multi-cell system is operable to determine whether its stored identifier matches a unique identifier of said multi-cell system.

32. The system of claim 31 wherein if said at least one cell determines that its stored identifier matches said unique identifier of said multi-cell system, then said at least one cell is operable to identify its corresponding stored configuration data as the proper configuration data for configuring said multi-cell system.

33. The system of claim 30 wherein each of said cells include non-volatile memory to which are stored configuration data and a corresponding identifier that uniquely identifies a given multi-cell partition to which the cell's respective stored configuration data corresponds.

34. A system comprising:

non-volatile storage means, on each of a plurality of cells of a particular multi-cell partition, for storing configuration data;

non-volatile storage means, on each of said plurality of cells, for storing an identifier that uniquely identifies a multi-cell system to which the cell's respective stored configuration data relates; and

means, on at least one of said plurality of cells, for determining if said configuration data stored to any of said plurality of cells relates to said particular multi-cell partition.

35. The system of claim 34 wherein said means for determining comprises:

means for determining whether a unique identifier of said particular multi-cell partition matches said at least one cell's stored identifier.

36. The system of claim 35 further comprising:

means for using the configuration data of a cell determined to have a stored identifier that matches said unique identifier of said particular multi-cell partition for configuring the particular multi-cell partition.